ABSTRACT OF THE DISCLOSURE

A digital transmission apparatus, which accommodates a plurality of terminals for exchanging asynchronous frames each including a MAC address, and is used for transmitting the asynchronous frames by putting each of the asynchronous frames in a synchronous frame, includes an address table for storing an address of a group including the digital transmission apparatus, a header-creating unit for creating a header including a communication-destination transmission-apparatus identification including an address of a group including the digital transmission apparatus and a header-adding unit for creating a first frame by adding the header to data of an asynchronous frame received from any one of the terminals.